

THE ORIENTAL SPECIES OF *OPLODONTHA*
(Diptera: Stratiomyidae)

BY MAURICE T. JAMES

State College of Washington, Pullman, Washington

The genus *Oplodontha*¹ Rondani apparently has its center of distribution in tropical Africa, including Madagascar, where at least fifteen described species are known to occur. Outside this area, however, the genus is not well represented. Two species, *O. oasina* (Lindner) from North Africa and the widely distributed *O. viridula* (Fabricius) are recorded from the Palaearctic Region, but to date only one Oriental species, *O. rubrithorax* (Macquart), which is also known from tropical Africa, has been referred to this genus. A second Oriental species, *Stratiomys minuta* Fabricius, is, however, clearly congeneric with *O. rubrithorax*, and in this paper, I am describing a third, from the Philippine Islands.

Oplodontha was proposed by Rondani in 1863 for *Stratiomys viridula* Fabricius. The character on which the genus was based, namely, the absence of the "oblique venule (beyond the stigmatic venules) uniting the marginal and costal veins" seems to be a good one, provided that it is properly interpreted. The vein to which Rondani refers is R_{2+3} , if the "stigmatic venules" are interpreted as those forming the base and upper edge of the stigma; they cannot include the one closing the stigma (that is, R_{2+3}), since that vein is absent. Pleske² used the same interpretation (venis subcostali et radiali junctis), but Lindner³, in adapting his key from Pleske's work was apparently confused by that author's use of the Schinerian system, although the resulting misstatement (sc und r_1 verschmolzen) was corrected in the diagnosis on page 84 (r_{2+3} ist mit r_1 verschmolzen). In this connection, however, I question the correctness of Pleske's assumption that R_{2+3} is united with R_1 ; I think more probably that R_1 and R_s remain as two undivided veins, rather than that the anterior branch of R_s coalesces with R_1 .

¹The form *Hoplodonta*, as emended by Kertész, has been used by most authors. Nevertheless, it is better to use Rondani's original spelling, even though it is not so desirable from the standpoint of orthography.

²Ann. Mus. Zool. Acad. Sci. Russie, vol. 23, p. 336. 1922.

³Die Fliegen der Palaearktischen Region, vol. 18, pp. 80, 84. 1933.

Another error into which authors commonly fall is to consider the vein mentioned by Rondani as R_4 . Although this vein, like R_{2+3} , is wanting, its absence is of no diagnostic value, whereas that of R_{2+3} seems to be.

Taken alone, this character is not a strong one; but the general wing pattern, along with other characters, is sufficiently distinct to be of generic importance. The following characters apply to all species known to me.

Genus OPLODONTHA Rondani

Flagellum of antenna six-segmented, the fifth segment minute and together with the sixth forming a short, blunt, style. Face protuberant. Eyes pilose or bare. Proboscis moderately elongated, when extended at least three-fourths head height, the labella rigid and slender. Scutellum semi-elliptical, with two distinct, though sometimes small, spines. Wing longer than abdomen; venation considerably reduced; vein R_s unbranched and distinctly bowed downward on its basal part, making the submarginal cell relatively broad; $r-m$ sometimes wanting; discal cell sometimes wanting, when present small, its height less, usually considerably so, than the distance from its upper corner to the costal margin; vein M_3 wanting; veins M_1 , M_2 , and Cu_1 weak, often reduced to a stump and a fold, sometimes plainly evident throughout. Size usually small, most species being no longer than 6 mm.

KEY TO THE ORIENTAL SPECIES

1. All femora largely black; all tibiae prominently black-ringed; venter black, except for a large yellow area on the second segment and narrow yellow posterior margins on the following segments.....*luzonensis*
- . At least front and middle tibiae entirely yellow; venter wholly yellow, or nearly so.....2
2. Pleura without pale spots; scutellum wholly black; hind femur and tibia wholly yellow.....*rubrithorax*
- . Pleura with conspicuous pale spots; scutellum yellow, except base; hind femur and tibia each with a black annulus.....*minuta*

Eulalia exigua Lindner,⁴ from Amboina, may belong to this genus as Lindner compares it with *rubrithorax* and *minuta*; however, his statement "D wohlentwickelt, mit zwei *m*-Asten" makes this disposition highly doubtful.

⁴Ann. Mag. Nat. Hist., ser. 10, vol. 20, pp. 379-380. 1937.

Oplodontha luzonensis James, new species

Female: Head chiefly yellow; a broad band on vertex, including ocellar triangle, another band above base of antennae, biarcuate on its upper border and attenuated laterally, but narrowly reaching each eye, and the occiput, except its broad orbits, black; facial prominence, a small spot on each side and sometimes connected with it, and the larger part of the oral margin, brownish to black. Front rather strongly convex, its sides almost parallel; at vertex very slightly less and at base of antennae very slightly greater than half head width. Occipital orbit of moderate breadth, shining, bare. Eyes with rather dense, short, black hair; pile of head short, erect, rather dense, uniformly pale. First and second antennal segments, flagellum excluding style, and style in ratio of 18: 10: 32: 4; first and second segments yellow, flagellum, including style, brownish. Proboscis brownish to black.

Mesonotum black; humerus bright yellow; supra-alar callus brownish yellow; pleura chiefly black, on each side with four callus-like yellow spots, located one below humerus, one on mesopleuron anterior to wing base, one on pteropleuron below wing base, and one on upper part of sternopleuron; scutellum yellow, its base broadly black; spines short, blunt, yellow. Pile of thorax erect, rather dense, whitish; considerable whitish tomentum on mesonotum.

Coxae and trochanters black; femora black, except apices; each tibia with apical half mainly black; legs otherwise yellow, the tarsi darkened somewhat apically. Wing hyaline; stronger veins yellow; discal cell present; vein r-m wanting; veins M_1 , M_2 , and Cu_1 developed only at base, continued by a mere fold; Cu_2 and 2nd A weak.

Abdomen dorsally black, the very narrow lateral and apical margin and a small triangle at each apical angle of segments two, three, and four yellow; venter black, the narrow lateral and apical margin, the narrow apices of segments three and four, and a large trapezoidal spot occupying about the median half of segment two, yellow. Pile of abdomen short, inconspicuous, wholly pale.

Length, 4.5 to 6 mm.

Male. Eyes briefly subcontiguous above base of antennae. Occipital orbit not developed. Head black, except a prominent yellow triangle adjacent to the eye on each side of and below the facial prominence. Pile of thorax and abdomen as in the female, but longer and more conspicuous.

Holotype, female, Mt. Makiling, Luzon, P. I. (Baker), U. S. National Museum, No. 58583. *Allotype*, male, same data. *Paratypes*, 6 females, 14 males, same data; 1 male, Los Baños, P. I. (Baker).

OPLODONTHA RUBRITHORAX (Macquart)

Odontomyia rubrithorax Macquart, Diptères exotiques nouveaux ou peu connus, vol. 1, pt. 1, p. 185, 1838; de Meijere, Tijds. v. Ent. vol. 1, p. 224, 1907; Brunetti, Rec. Indian Mus., vol. 1, p. 128, 1907; Brunetti, Fauna of British India, Diptera Brachycera, vol. 1, p. 67, 1920; Brunetti, Rec. Indian Mus., vol. 25, p. 128, 1923.

Odontomyia immaculata Brunetti, Rec. Indian Mus., vol. 1, p. 130, 1907.

Hoplodonta rubrithorax Lindner, Bul. Mus. royal d'Hist. Nat. Belgique, vol. 14, p. 24, 1938; James, Amer. Mus. Nov., No. 1088, p. 2, 1940.

This species shows considerable variation in the color of the legs; the front and middle femora typically have each a median black band, although the legs may be wholly yellow. The brassy to reddish pubescence of the thorax, which suggested the specific name to Macquart, is often obscure, and may be yellowish.

This species is widely distributed. Brunetti has recorded it from various parts of India, Ceylon, and Thailand, and Lindner has recorded it from the Belgian Congo. I have seen a number of specimens from Okinawa, Ryukyu Islands, May, 1945 (Richard Bohart); Mt. Makiling, Los Baños, Davao, and Biliran Is., Philippine Islands (Baker); and Bantar, Gebang, Java (Bryant and Palmer).

OPLODONTHA MINUTA (Fabricius), new combination

Stratiomys minuta Fabricius, Entomologia Systematica, vol. 4, p. 268, 1794; Systema Antliatorum, p. 86, 1805; Wiedemann, Ausereuropaische Zweiflügelige Insekten, vol. 2, p. 74, 1830.

Stratiomys pusilla Fabricius, Entomologia Systematica, vol. 4, p. 271, 1794; Systema Antliatorum, p. 89, 1805; Wiedemann, Ausereuropaische Zweiflügelige Insekten, vol. 2, p. 75, 1830.

Odontomyia minuta Brunetti, Rec. Indian Mus., vol. 1, p. 126, 1907; Fauna of British India, Diptera, Brachycera, vol. 1, p. 65, 1920; Rec. Indian Mus., vol. 25, p. 124, 1923.

Odontomyia pusilla Brunetti, Rec. Indian Mus., vol. 1, p. 128, note, 1907.

Odontomyia ochracea Brunetti, Rec. Indian Mus., vol. 1, p. 129, 1907.

Odontomyia submutica Brunetti, Rec. Indian Mus., vol. 1, p. 130, 1907.

Oxycera indica Brunetti, Rec. Indian Mus., vol. 1, p. 119, 1907.

This species, according to Brunetti, is very widely distributed in India, and is extremely variable in the abdominal markings, which range from almost wholly yellow to almost wholly black.